SCIENCE & GOVERNMENT REPORT

The Independent Bulletin of Science Policy

Vol. VII, No. 8 | P.O. Box 6226A, Washington, D.C. 20015 | May 1, 1977

Energy Plan: Main R&D Impact is on Nuclear Program

With its heavy concentration on tax incentives and pricing policies to wean Americans from their addiction to energy, President Carter's energy policy has relatively few major implications for research and development.

The chief R&D impact comes in the nuclear area, where there is still a good deal of confusion resulting from Carter's announcement that the United States will refrain indefinitely from reprocessing commercial nuclear fuel and recycling plutonium, and that the breeder reactor program will be sharply cut back. One effect is that some of the savings on nuclear R&D will be reprogrammed into support for solar and geothermal research and efforts to convert coal into synthetic oil and gas, according to budget revisions proposed by Carter last month.

GAO Strongly Criticizes Nuclear Plant Security--Page 8

The overall strategy for energy supplies is to concentrate on short-term efforts to force industry to switch from burning oil and gas to burning coal, coupled with efforts to expand the use of light-water reactors. That strategy rests on two assumptions. First, that there will be sufficient uranium in the United States to fuel domestic reactors and to meet contracts for enriched uranium from abroad. And second, that the environmental effects of burning increased quantities of coal can be sufficiently controlled. Both assumptions will be tested in new studies announced by Carter as part of his energy package.

As far as the nuclear program is concerned, Carter has taken his cues largely from the pages of a recent report by the Ford Foundation. The decision to defer reprocessing and plutonium recycling was promised by Carter several times during the election campaign, and should have come as no surprise. It is relatively unambiguous: there will be no federal aid to start up a large commercial reprocessing plant which has been constructed in South Carolina. It will probably be mothballed.

The decision on the breeder program is less definitive. The stated intention of the new proposal is to concentrate on research and development rather than rushing to build a demonstration commercial reactor. Carter has proposed that a small test reactor under construction in Washington State should be completed, but that the demonstration reactor planned for a site on the Clinch River in Tennessee should not be built.

Carter said in his statement on the breeder program

(Continued on Page 2)

SGR *Almanac* Available

Science & Government Report International Almanac—1977, a 305-page, hardbound review of science-policy developments in over 30 nations, came off the press last week. The volume contains original contributions from 18 journalistic and academic specialists in science-policy affairs, plus a directory of national research organizations and personnel. In addition, it includes the texts of major science-policy documents published in 1976.

The list price is $75 per copy. However, SGR readers may order copies for $54 each.

Address: SGR *International Almanac,* PO Box 6226N, Washington, DC 20015.

In Brief

The six-year-old National Cancer Program will receive its first serious Congressional examination at hearings next month before the House Intergovernmental Relations and Human Resources subcommittee, chaired by Rep. L.H. Fountain (D-N.C.). Fountain, who has oversight authority over the National Cancer Institute, is inviting a broad spectrum of witnesses, including some of the leading skeptics of the so-called War on Cancer. He has tentatively scheduled three days of hearings, starting June 14.

The Cancer Program, which is up for another three-year renewal this year, has heretofore been reviewed by committees dominated by close allies of the cancer lobby. Staff aides say Fountain intends to lay out the pros and cons of the program, rather than preside over the usual paeans of praise and demands for more money.

Those "child-proof" aspirin-bottlecaps required by federal law since 1973 provide rich stuff for cartoonists and ranters against government intervention. But apparently they also save a lot of children from fatal aspirin poisoning. Deaths from such accidents declined from 46 in 1972 to 17 last year, according to the Consumer Product Safety Commission.

...Plan Suggests 300-400 Light-Water Reactors

(Continued From Page 1)

that the Clinch River Plant would be revamped to study alternative breeder designs which present less of a proliferation hazard. Acting ERDA Administrator Rober Fri said in a press conference last week that the plant would be "indefinitely deferred," and that a number of support facilities would be "delayed." Other ERDA officials note that a switch from the liquid-metal fast-breeder planned for the Clinch River plant to an alternative concept would mean more-or-less starting from scratch, and they are not sure exactly what Carter has in mind.

In any case, Carter has proposed that funding for the breeder program be reduced to $483 million in fiscal year 1978, a reduction of $372 million from the budget proposed by President Ford, and $173 million less than the budget revisions proposed by Carter himself in February (SGR Vol. VII, No. 4). Most of the reduction is taken from the budget for the Clinch River plant, with only $33 million left to turn the project off. It will probably take several months before the breeder program is finally sorted out.

In spite of those moves, however, Carter's energy strategy seeks to expand the use of light-water reactors to help meet energy demands for the next few decades. Though the Administration has made no firm estimates of the number of plants likely to be in operation by the turn of the century, a backgound statement distributed by ERDA notes that "it is expected that substantial reliance must be placed on nuclear energy to help meet energy needs over the next quarter century." The statement then goes on to assume that "somewhere between 300 to 400 million kilowatts of nuclear capacity will be installed in the US by 2000," an assumption which translates into between 300 and 400 plants.

The immediate question is whether there is sufficient domestic uranium to fuel that number of plants. Proven uranium reserves amount to about 1.8 million tons, which is just about enought to fuel 300 plants for their anticipated lifetime, but ERDA reckons that there may be double that quantity in deposits yet to be discovered. A major uranium exploration program will therefore be launched to provide a more accurate assessment of reserves.

As for the coal conversion effort, Carter is hoping that a variety of regulations and financial incentives will encourage factories and utilities to switch from oil and gas to coal, and he has also announced that the Administration will insist that the best available technology be used to clean up pollutants. Nevertheless, there may be an intractable problem in burning fossil fuels which could crimp the entire coal effort — the so-called greenhouse effect. According to some theories, increasing quantities of atmospheric carbon dioxide from burning fossil fuels may lead to an increase in average global temperatures, which in turn would have a severe effect on agriculture.

Consequently, Carter has proposed that $1 million be added to ERDA's budget for an intensive study of the carbon dioxide problem (early versions of Carter's energy package said $3 million, but the final figure is $1 million). If the greenhouse effect turns out to be a real problem, "it could be to the fossil-fuel program what proliferation has been to the nuclear program," Fri said last week. —CN

Atkinson Named NSF Director

The long-expected selection of Richard C. Atkinson as Director of the National Science Foundation came through last week, when the White House announced that he would be nominated for the post.

Atkinson, who has been serving as Acting Director since August, joined the Foundation as Deputy Director in 1975. Formerly chairman of the Department of Psychology and dean of the School of Humanities and Sciences at Stanford University, he is the first social scientist to head NSF since it was founded, in 1950.

The delay in making the appointment was due simply to the paperwork logjam at the White House.

© Science & Government Report, Inc., 1977

ISSN 0048-9581

Contributing Editors
Colin Norman, Pamela Moore

Editor and Publisher
Daniel S. Greenberg

European Correspondent
Michael Kenward (London)

Circulation Manager
Alice Anne Freund

Independently published by *Science & Government Report*, Inc., twice monthly, except once each in January, July and August. Annual Subscription: Institutions, $75 (two years, $140); individuals, $44 (two years, $75). Editorial offices at 3736 Kanawha St., N.W., Washington, DC 20015. Tel. (202) 244-4135. Second class postage paid at Washington, DC. Please address all subscription correspondence to Box 6226A, Northwest Station, Washington, DC 20015. Reproduction without permission is prohibited. SGR is available on Xerox University Microfilms.

Study Finds FDA Harrassed Critical Employees

The latest product of HEW's marathon inquiry into alleged sins of the Food and Drug Administration concludes that the agency isn't a puppet of the pharmaceutical industry but has a solid record of unfairness toward a group of employees who were not sympathetic to the industry.

Treatment of these employees was so harsh and unreasonable, the inquiry concludes, that the new leadership of HEW and the FDA should consider apologizing to them "on behalf of their organizations." It was further recommended that the Attorney General consider criminal proceedings against Henry E. Simmons, former Director of the Bureau of Drugs, for possible perjury and falsification of evidence in a personnel grievance hearing. However, between the writing and publication of the report, the Attorney General declined to prosecute.

These findings and recommendations were produced by a special study group established by the HEW Secretary's Review Panel on New Drug Regulation. The Panel was created to investigate FDA after a group of present and former FDA employees and consultants made various critical charges about the agency in Senate testimony in 1974. Still going about its task of assessing the drug review process, the panel assigned its special counsel, Frank F. Schwelb, to investigate charges that staff decisions favorable to industry were almost invariably approved by FDA higherups, while negative decisions were usually reversed and followed by punitive actions, such as demeaning transfers and denial of promotions. Schwelb's report, *Investigation of Allegations Relating to the Bureau of Drugs,* covers 765 pages, reads in many parts like a slick novel of bureaucratic intrigue, and is utterly damning to the past management of FDA.

The report states that while FDA officials apparently acted on their own, the Nixon Administration created an encouraging atmosphere for manipulating the civil service regulations to get at unwanted holdovers from previous administrations. Thus, it notes that Nixon officials utilized unwanted transfers to force employees to resign, and adds that "there is little doubt that, as early as 1961 HEW officials were using transfers to unwanted places or jobs as techniques to eliminate troublesome civil servants, and lying about it to boot."

Schwelb's report was unanimously endorsed by the seven-member Review Panel, which, in a letter to HEW Secretary Joseph A. Califano, made the following points:

- "Beginning in 1970, FDA management, while not dominated by industry, made a conscious effort to make the agency less adversarial towards and more cooperative with drug manufacturers and to neutralize reviewing medical officers who followed a different philosophy."
- "The program to neutralize the more adversarial

(Continued on Page 4)

R&D Funds Rise for Second Year, Total to Reach $40 Billion

Total spending on research and development in the United States is expected to stay a step ahead of inflation in 1977, following a similar rise in 1976, according to estimates published by the National Science Foundation. However, the combined two-year increase will not be sufficient to wipe out the inflationary losses which occurred during the Nixon years.

The NSF figures, which include estimated spending by industry, government, and other sources, also depict an upturn in the employment of scientists and engineers.

A recent study by the General Accounting Office questioned the accuracy of spending figures published by NSF (SGR Vol. VII, No. 7), suggesting that some federal agencies may be under-reporting their R&D outlays. Such inaccuracies, however, would not upset the general conclusion that support for R&D is beginning to show an upward trend, however.

The NSF figures show that total spending on R&D is expected to climb to $40.8 billion this year, a 9 per cent increase in current dollars or three per cent above the anticipated inflation rate. Some $21.8 billion of the total is expected to come from the federal government; industry will spend about $17.5 billion, and the rest will come from universities, non-profit institutions, and other sources.

If the figures are accurate, R&D would account for some 2.2 per cent of the gross national product, the same proportion as last year. The proportion has, however, been declining steadily since 1964, when R&D accounted for 3.0 per cent of GNP.

As for employment, NSF reports that some 542,000 scientists and engineers were employed in all sectors of the economy last year, a 2 per cent increase over 1975. The total still falls about 20,000 short of the peak in 1969, however.

(Copies of the study, No. NSF-77-306, are available without charge from the Division of Science Resources Studies, NSF, Washington DC 20550).

Brain Drain Declines, But Still over 6000 a Year

The brain drain of scientists and engineers into the United States has been sharply reduced in recent years by the adoption of strict immigration controls, but it is still running at more than 6000 per year, according to figures compiled by the National Science Foundation. The controls have also resulted in a significant increase in the proportion of scientists and engineers entering the United States from Asian countries.

Some 100,000 scientists and engineers took up permanent residence in the United States between 1966 and 1975, the study shows. They entered at the rate of about 11,500 a year between 1966 and 1972, but by 1975 the influx had dipped to about 6500 a year.

A major impact on the brain drain occurred in the mid-1960s with the elimination of a longstanding immigration policy which gave precedence to immigrants from Western Europe. The policy was replaced with a system under which applicants would be given preference according to criteria such as whether they have special skills, and so on. This policy change radically altered the nature of the brain drain, for by 1970 56 per cent of immigrant scientists and engineers came from Asia and only 19 per cent from Europe. In 1965, the relative proportions were 28 per cent and 40 per cent, respectively.

A second major impact on the influx of scientists and engineers came in the early 1970s when, in response to swelling unemployment among scientific workers in the United States, scientists and engineers were no longer given priority in the immigration lines. This change in the regulations resulted in a steep decline in the brain drain, which bottomed out in 1974 at a little over 6000 per year.

As for the occupations of immigrant scientists and engineers, NSF reports that there have been no dramatic shifts in the ratios of scientists to engineers; over the decade, scientists comprised about one third of the influx and engineers about two thirds.

NSF also reports that there has been a significant increase in the numbers of scientists and engineers entering the United States on temporary visas. In 1975, 5500 came for a limited period, compared with fewer than 3000 in 1972.

In that regard, it is worth noting that would-be visitors to the United States, including scientists and other scholars, who have been associated with left-wing organizations, face a lengthy and often troublesome clearance process before they can be admitted. The restriction is written into the immigration laws and it has occasionally resulted in the exclusion of eminent would-be foreign visitors.

Last month, Rep. Robert Drinan (D-Mass.) introduced a bill, with strong endorsement by the National Academy of Sciences and the Federation of American Scientists, to remove such restrictions.

(Copies of the NSF study are available from the US Government Printing Office, Washington DC 20402, Stock No. 038-000-00309-7 for 35 cents; there is a minimum charge of $1 for each order).

Frosch Picked to Head NASA

Robert A. Frosch, a veteran Washington research administrator who is currently Associate Director for applied oceanography at the Woods Hole Oceanographic Institution, has been chosen to be the head of NASA. He succeeds James C. Fletcher, who has held the job since 1971. Fletcher had indicated that he wanted to stay on, and the Administration was considering retaining him. But when he got an interesting job offer elsewhere and couldn't get a swift decision from the White House, he resigned, effective May 1.

Frosch, who is a physicist, was Deputy Director of the Advanced Research Projects Agency from 1965-66 and then served as Assistant Secretary of the Navy for research and development until 1973.

FDA *(Continued From Page 3)*

reviewers was carried out by various devices, including a systematic pattern of involuntary transfers to positions which the incumbents did not want, and, in a few cases, removal from the review of particular drugs."

- "FDA management generally concealed the truth about the reasons for the transfers from the persons affected, and in the case of the 1972 grievance of Dr. John Nestor, gave incomplete and misleading testimony under oath as to why he was transferred from his position."

The study also contemptuously rejects a self-investigation of FDA carried out by former Commissioner Alexander Schmidt and published in 1975 in a 906-page volume titled, *Commissioner's Report* (SGR Vol. V, No. 29).

Noting that Schmidt "concluded, among other things, that the evidence showed 'no pattern of harrassment of employees or transfers or removals of people for punitive reasons,'" the latest study states, "We find this an inadequate summary of an unfortunate pattern of events..." To which it adds, "It is a measure of the limits of self-investigation and of the Commissioner's methodology that this ideology-based pattern [of punitive action], which appears to us to be obvious to any dispassionate observer, is not even mentioned in the entire 906 pages of the *Commissioner's Report*. —DSG

Policy Research: Washington's Growth Industry

Washington's proclaimed dedication to thrifty use of the federal dollar is creating a boom for the social sciences.

The source of this new-found prosperity is a desire to foresee the effects of proposed federal programs and to measure the effects of those that have been put into operation, particularly in those multi-billion-dollar fields that are referred to as "social engineering."

Social Science Report

Sprouting up to offer answers are numerous organizations and groups that claim expertise in cost-benefit analysis, program and policy research and evaluation, and various other analytical and crystal-ball skills.

Drawing upon disciplines as disparate as economics and psychology, these organizations range from university-based groups to independent "think tanks," from profit-making firms to the government's own in-house research units.

The surge of activity in this field—abetted by the Carter Administration's obsession with government efficiency and re-organization—is reflected most clearly in the recent establishment of two interdisciplinary professional societies whose members are mainly involved with examining government programs and policies. These are the Council for Applied Social Research, a mixed group of academic and entrepreneurial research specialists, fathered by Clark Abt, head of the Cambridge-based Abt Associates, and the Evaluation Research Society, also interdisciplinary, mainly devoted to evaluation research, and organized by Marcia Guttenberg, a Harvard psychologist.

The Council for Applied Social Research held its first annual meeting in March in Washington and the Evaluation Research Society will hold its first substantive meeting in Washington later this year. The early discussions of both groups indicate that while the

(Continued on Page 6)

HEW Health Chief Quits After One Month

If it is possible to resign from a job to which one has not been officially appointed, the Carter Administration has received the first resignation from one of its own high-level appointees.

The distinction was achieved last week by Christopher Columbus Fordham III, MD, who arrived at the Department of Health, Education, and Welfare early in April as Secretary Joseph A. Califano's choice for Assistant Secretary for health. Fordham, dean of the University of North Carolina School of Medicine since 1971, was on board in the status of consultant while the languid clearance process ran its course.

Official announcement of his appointment was expected at any moment when he suddenly decided he had had enough of HEW and Mr. Califano. On April 20, following a meeting with the Secretary, the prospective Assistant Secretary cancelled his appointments and flew back home to resume the deanship. He left behind a letter to Califano citing "deep personal reasons," but did not offer any details. Califano responded that Fordham "would have made an excellent member of the health team," and expressed pleasure that Fordham is still a member of a newly formed advisory committee on national health insurance.

Though the Fordham-Califano correspondence is brief and unrevealing, the cause of the departure is reasonably clear, namely, that the 'round-the-clock Secretary wants to run that sprawling Department all by himself, and isn't well-disposed to subordinates who might get in the way.

Prior to Fordham's acceptance of the job, Califano received rejections from at least three candidates: David Hamburg, president of the Institute of Medicine; former Congressman William Roy, of Kansas, who is a physician, and Charles Sandler, director of the Massachusetts General Hospital.

What apparently turned them away from what is generally regarded as the top health-policy job in the nation is that within weeks of taking office, Califano was spewing out major health-policy decisions before he filled the job of Assistant Secretary for health. Thus, he decided to keep Donald Fredrickson as director of NIH and fire David Sencer as director of the Center for Disease Control. He reorganized major aspects of Medicare and Medicaid, and announced that he would seek legislation to put a ceiling on hospital cost increases. In these and other ways, Califano indicated that he would be his own Assistant Secretary for health, which inevitably had a dampening effect on recruiting prospects.

It is yet to be seen where Califano will turn next for a recruit. Since it is doubtful that any well-established non-government figure in the health-policy field could be lured to the post at this point, the odds are that he will reach into the HEW bureaucracy and elevate someone who's already there.

...Spending to Analyze the Impact of Spending

(Continued From Page 5)

chances for social scientists to engage in guiding decision-making are perhaps better than ever, there is an awareness that there is still considerable skepticism in some quarters over the usefulness of their services, and, indeed, there are numerous schisms within the field over the best ways to conduct research.

The Council's debut is a case in point, with the group's organizers gingerly justifying the role of social research in policy-making while blending a soft sell with frequent statements about the need to improve the quality of policy research. While the meeting drew such Washington policy celebrities as Congressional Budget Office Director Alice Rivlin, former HEW evaluation chief William Morrill, and former National Institute of Education head Thomas Glennan, the parley nonetheless reflected the tentativeness of an organization that has not yet settled into place.

Most of the Council's general discussions focused on the questions of whether federally funded research on such topics as income maintenance, compensatory education, and a host of other issues has been worth the price.

At an opening plenary session, Clark Abt, a political scientist, attempted a cost-benefit analysis of applied social research over the last ten years. He estimated that the federal government has spent about $7.4 billion on social policy and program research, related in one way or another to $1000 billion spent on social programs between 1965 and 1975. Although he concluded that the research investment was probably worth it, he noted that measuring the productivity of such research is so difficult that few have tried it.

Despite the sanguine conclusion, Abt said his examination of that decade of research revealed a major mismatch between the allocation of funds for research and the allocation of funds for programs. Welfare programs took the largest budget bite, for example, but research on welfare programs and policies received only the fourth largest expenditure for applied social research.

The environment, on the other hand, received a disproportionately large share of social research funds given the relatively low funding devoted to actual programs. Whatever benefits social research can bestow on the policy-making process, said Abt, they can be vastly improved if the largest fractions of federally funded social research efforts are applied to social program areas that get the largest share of funds.

Abt argued that it is extremely important to investigate the productivity of policy research, both to counter critics and to upgrade the research endeavor. What he called his "crude initial attempt" at assessing research worth suggested that "applied social research cover its own costs." Nevertheless, he said he found "enormous variation" in productivity between various programs and at different levels of analysis, and he indicated that more refined efforts to gauge the value of research are needed.

Other participants, including Glennan, now winding up a major National Academy of Sciences study on the federal government's in-house and extramural applied social research activities, indicated that identifying the benefits of individual pieces of social research may be somewhat irrelevant, in addition to being very difficult. Glennan said that the real benefit of social research seems to be cumulative knowledge. "Social policy-making is a process not an event," said Glennan, adding that the piecemeal, partial and time-bound nature of many studies, even mammoth longitudinal undertakings as the famed New Jersey income maintenance experiment, limit the impact of single studies. In effect, by the time the data come in, few policy-makers are still asking the same question.

From his study, Glennan said, he had come to the view that one of the most important effects of federally funded social research has been the development of a community of policy researchers and a body of shared knowledge. The crucial questions in policy research, he said, have less to do with whether or not a particular piece of research significantly influences government decision-making and more to do with how to manage the development of problem-centered knowledge, how to link those knowledge bases to the policy-making process, and how to oversee the process.

Morrill, who was recently succeeded by Henry Aaron as HEW Assistant Secretary for planning and evaluation, agreed. "It may be possible to apply a broad relevancy test to applied social research," he said, but much more difficult to trace any real impact to a specific study. Morrill said that because of the cost and time they require, major social experiments such as the income-maintenance experiments should be the exception rather than the rule. Even more critical of spending for large-scale social experiments was Robert Levine, of the Congressional Budget Office staff. Levine speculated that applied social research is often a "social cover" for digging out a lot of information under the guise of helping to direct policy. While the information may have some value of its own over time, he added, the "experiment itself is a social myth," because the results are generally transient and often ungeneralizable beyond experimental populations or conditions.

(Continued on Page 7)

Military Medical School Given Congressional Reprieve

The military medical school—slated for extinction by Defense Secretary Brown as a money-saving measure—has been reprieved by Congress.

The Secretary can, of course, fight back. But the Congressional action appears to have been largely inspired by annoyance over executive tampering with a legislative creation, and it is doubtful that the Administration wants to lock horns with Congress on a minor but emotional issue when it needs all the friends it can muster on Capitol Hill for its energy and tax programs.

Created in 1972 by the now-retired F. Edward Hebert when he was in his heyday as chairman of the House Armed Services Committee, the school, officially titled the Uniformed Services University of the Health Sciences, took in its first class last September. Having survived many attempts to throttle it as a costly and unnecessary means of producing physicians for the armed services, it was generally considered to be unassailable, until Brown suddenly announced on February 22 that he planned to terminate it at the end of this school year (SGR Vol. VII, No. 7).

The move, he said, would save $14 million in next year's budget, plus additional funds for completion of a permanent campus on the grounds of the National Naval Medical Center, in Bethesda, Md.

Friends of the school responded at once with a lobbying campaign in Congress. Led by former Defense Secretary David Packard, who is chairman of the board of regents and acting president of the school, they contested studies that put a high price on the cost of producing physicians at the school. But perhaps the most telling point was that the school had repeatedly passed muster in Congress and should not be terminated by an Executive decision.

Testifying before a House Appropriations subcommittee on March 24, Packard stated, "On 10 occasions in the past six years, the Senate and the House of Representatives specifically considered the establishment of this medical school. Defense officials have testified as to the need for the school. In 1975, special Congressional hearings were held on this matter. The Congress, on all occasions, has indicated its desire to establish this school. The decision to terminate the program is not exclusively that of the Executive; the Congress must also be involved."

Though the legislative procedures were complex because funds for the school had to be inserted in a supplemental appropriations bill which the House had already passed, two key votes demonstrated strong support for the school. On April 1, the Senate voted, 56-30, to appropriate $12.5 million for the school; and on April 21, the House voted, 250-162, to accept that figure.

The school had sufficient money in the pipeline to get along without a supplemental appropriation. The vote was simply a Congressional signal for Brown to keep hands off the military medical school.

Policy Research *(Continued From Page 6)*

Although the value of research in policy-making was at least debated, it was unlikely that the Council would have been organized at all were there any serious question about whether policy research should be funded in the first place. In fact, some who were in on the early development of the Council recall that one of the events which led to discussion of banding together was a threatened HEW move a few years back which would have limited HEW-funded research by profit-making organizations.

In any event, the stated aim of the Council, according to its president, Northwestern University psychologist Robert Boruch, is to enhance "the quality, the usefulness, and the understanding of applied social research." The Council, he said, would attempt to encourage public interest in good research and how it can be used, along with trying to identify questionable research. At the same time, he emphasized that the Council's bylaws expressly forbid "anything resembling a lobbying effort" and that the goals of the Council are educational.

However, some members note that the Council will bear watching to see whether it evolves as a forum for thoughtful discussion and debate or as an organization devoted to promoting a new interdisciplinary discipline. At least one of the reasons for the lobbying restriction reportedly was to ensure the participation of government research managers, without whom the Council would be minus a rather significant segment of the policy research community; with them, however, it could run the risk of public suspicion of undue coziness between those who sponsor evaluation and policy research programs and those who are funded by them.

That potential problem was brought home when the Council presented its newly established award for the best, most articulate and informative government-produced request for proposal (RFP). The winner: John Evans, Assistant Commissioner for planning and evaluation in the Office of Education. The prize was handed to him by pyschologist Launor Carter, a long-time official with the System Development Corporation, which was the firm that made the winning bid for the multi-million dollar, multi-year project advertised by the award-winning RFP. —PM

GAO Assails Nuclear Power Plant Security

A little noticed report issued last month by the General Accounting Office (GAO) has some chilling things to say about the vulnerability of nuclear power plants to sabotage or terrorist attack. After looking into security at six separate plants, GAO concluded that "security systems at perhaps all powerplants would not be able to withstand sabotage attempts by threats that are now considered minimum by NRC (the Nuclear Regulatory Commission)."

GAO is not noted for its blunt language or hostile criticism, but in this case even the title of the report minces few words: "Security at Nuclear Powerplants — At Best Inadequate."

The study turned up evidence that security guards are often poorly trained and overworked, that physical security equipment is often inadequate, and that there is frequently a very high turnover of security personnel, in one case as high as 48 per cent a year.

In one case, GAO officials accompanied NRC inspectors to a power plant and they reported the following problems. "The inspector asked a guard manning the guard house to aim a closed circuit television camera on a particular spot. The guard tried but was unable to work the system. The inspector opened a door which rang an alarm in the guard house. After waiting several minutes, the guard house was called to find out why no one responded to the alarm. A guard in the guardhouse answered that all of the available guards were too busy."

At another site "we asked a guard about the locations of certain critical systems of the plant, including the control room. He told us that the guard force knew nothing about the location of any of these systems because the guards were not allowed inside the power plant."

GAO lays part of the blame for this catalogue of woes at the door of the NRC because no minimum standards have been set. NRC has been developing such standards for the past two years, a period which GAO calls "an inexcusably long time."

Shortly before the GAO report was published, however, NRC did issue a set of regulations, which GAO says are "on the right track." But the nuclear industry has been given until August 1978 to comply with the regulations, a period which GAO says is too long in view of the serious inadequacies that have been uncovered. It suggests that immediate steps should be taken to increase interim protection measures at all operating power plants, pending the adoption of the new NRC regulations.

(Copies of the report, No. EMD-77-32, are available from GAO, Distribution Section, PO Box 1020, Washington DC 20013, for $1).

Science & Government Report
Northwest Station
Box 6226A
Washington, D.C. 20015

Second class postage paid at Washington, D.C.

-00006 99/99
XEROX UNIV MICROFILMS
300 N ZEEB RD
ANN ARBOR MI 48106